DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-029322
Date Inspected: 25-Mar-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: Bonifacio Daquinag and Fred Michels

CWI Present:	☑ Yes	☐ No					
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG and Tower

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 12W-PP116.5-W2 deck access hole, this QA randomly observed the ABF/JV qualified welder Lin E. Yun perform the overhead welding and repairing the undercut and underfill that were marked by ABF QC on the Complete Joint Penetration (CJP) butt joint. The welder was observed welding in the 4G (overhead) position utilizing the Shielded Metal Arc Welding (SMAW) process using a 1/8” diameter E7018H4R electrode and using the Welding Procedure Specification (WPS) ABF-WPS-D15-1040C. The joint being welded is a single-V-groove butt joint welded with steel backing bar. ABF Quality Control (QC) Bonifacio Daquinag was observed monitoring the welding parameters. This QAI randomly monitored the welding parameter which appeared to be 120 amperes and appeared to conform to the contract requirements. During the shift, SMAW welding on the undercut and underfill were completed.

At Tower head grillage elevation 150 meters, this QA randomly observed Lou Xiao Hua perform 8mm fillet/seal welding on the drainage plate to tower grillage. The welder was observed preheating the plates to 225 degrees Fahrenheit using propylene gas torch prior welding. During welding, the welder was observed using the Shielded Metal Arc Welding (SMAW) process using a 1/8” diameter E7018H4R electrode as per the welding procedure specification ABF-WPS-D1.5-F1200A. This QAI observed the ABF QC Fred Michels monitoring the welding parameters and the workmanship of the fillet welding. The fillet welding was not completed on this date and will continue on the next scheduled shift.

FW Spencer:

At Bikepath 'E', this QA randomly observed FW Spencer the welder Damian Llanos perform the Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on 2" diameter weld-o-let to the 4" diameter compressed air line T-joints. The welder was noted welding the root pass with a 3/32" diameter E6010 electrode and the fill pass to cover pass using the 3/32" diameter E7018H4R electrode as per the welding procedure identified as WPS 1-12-1. The welder was also observed preheating to remove the moisture of the joint using a propylene gas torch prior welding. The ABF QC Bonifacio Daquinag was observed monitoring the parameters. The CJP welding on four (4) 2" diameter weld-o-let to 4" diameter compressed air line was completed on this date from panel point PP79.5 thru PP82.5 with the joints designated as 1/CA2/79.5/BE, 1/CA2/80.5/BE, 1/CA2/81.5/BE and 1/CA2/82.5/BE.

At location Panel Point PP57.5-PP58.5 Bikepath 'E', this QA randomly observed FW Spencer qualified welder Rick Kiikvee ID-5319 continuing to perform Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on the 2" weld-o-let for a 4" diameter compressed air line. The welder was observed welding the root pass with a 3/32" diameter E6010 electrode and the fill pass to cover pass using a 3/32" diameter E7018H4R electrode implementing procedure FW Spencer WPS 1-12-1. The welder was observed preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC Bonifacio Daquinag was observed monitoring the welding parameters. At the end of the shift, four (4) 2" diameter weldolet were completed and visually accepted by QC. The completed weld joints were designated as 1/CA2/55.5/BE, 1/CA2/56.5/BE, 1/CA2/57.5/BE and 1/CA2/58.5/BE.

Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer